

2.3.3 Insomnia (*Anidrā* or *Nidrānāśa*)

Introduction

Insomnia is the perception or complaint of inadequate or poor quality of sleep because of difficulty in falling asleep, difficulty in maintaining sleep or waking too early in the morning. It is the most common sleep disorder in elderly. Chronic Insomnia can lead to severe fatigue, anxiety, depression and lack of concentration. Insomnia can be classified in terms of its duration. It comes under *Vāta nānātmaja vikāra* and called *Anidrā* or *Nidrānāśa* in *Ayurveda*.

This sleep disorder is 1.5 times more common in persons aged more than 65 years compared to younger counter parts and incidence in women is 1.3 times greater than in men. The prevalence of Insomnia increases steadily with age and reported by up to one in 3 people aged 65 years and above¹¹.

1. **Transient Insomnia** - lasting from a night to a week and is usually caused by events that alter normal sleep pattern, such as traveling or sleeping in an unusual environment.
2. **Short term Insomnia** - lasts about two to three weeks and is usually attributed to emotional factors such as worry or stress.
3. **Chronic Insomnia** - occurs most nights and lasts a month or more.

Aetiology

Insomnia is occasionally a symptom of an underlying medical or psychological condition but it may be caused by stress or life style changes. About half of Insomnia cases have no identifiable cause. Some conditions or situations that commonly lead to Insomnia include-

1. Substance abuse; such as smoking, excessive consumption of caffeine, alcohol and recreational drugs
2. Disruption of circadian rhythms; such as shift work, change in work schedule
3. Uncomfortable and unusual sleeping environment
4. Psychiatric and neurological conditions; such as depression, manic depressive disorder, restless leg syndrome (RLS), post traumatic stress disorder
5. Biological factors - By advancement of ageing, the internal biological 'clock' that regulate sleep creeps slightly forward, compelling most older people to go to sleep earlier and to wake earlier. Also less physical and social activities and change in health may cause insomnia in elderly



6. Sleep disordered breathing - sleep apnea
7. Chronic medical illness - such as congestive heart failure, chronic obstructive pulmonary disease, heart burn, prostatic problems, menopause, diabetes, arthritis and hyperthyroidism
8. Certain medications - decongestants, bronchodilators and beta blockers and long term use of sleep medication
9. Excessive computer work or watching T.V.

Pathogenesis

Sleep disorders are associated with an impairment of melatonin production. Melatonin produced by the pineal gland at night, plays a role in regulation of sleep-wake cycle and diminished-melatonin secretion may cause insomnia.

Clinical features

Common symptoms of insomnia include

1. Not feeling refreshed
2. Inability to sleep despite being tired
3. Day time drowsiness, irritability, difficulty in concentrating
4. Impaired ability to perform normal activities
5. Body-ache and heaviness of the body

Complications

1. Depression
2. Anxiety disorder
3. Fatal accident
4. Increase in severity of chronic diseases such as high blood pressure and diabetes

Investigations

1. Polysomnography
2. Evaluation for depression and anxiety



3. Multiple sleep latency test (MSLT)
4. Thyroid function test
5. EEG

Management approaches

a. Prevention

1. Use of *madhura rasa* (sweet in taste) *pradhāna āhāra* and warm buffalo milk before bed time
2. Maintain active life mentally and physically
3. Practice *yoga* and meditation
4. Practice of *śiroabhyāṅga* and *pādābhyāṅga* (massage of scalp and plantar region).
5. Avoid excessive consumption of coffee, tea, soft drinks, alcohol and smoking
6. Avoid incompatible, indigestible, hot, spicy food articles
7. Avoid heavy meal and stress at night
8. Correction of hypertension and diabetes mellitus and urological problems, if any

b. Medical management

Line of treatment

1. ***Nidāna parivarjana* (avoidance of aetiological factors)** - before starting medication for insomnia any psychiatric, neurological condition and chronic medical illness should be treated first and smoking, excessive consumption of caffeine, alcohol, excessive computer work or T.V. watching should be avoided.
2. ***Pañcakarma* procedures** followed by ***Śamana cikitsā*** (Palliative therapy) should be advocated.
 - i. *Virecana* (*Purgation*) with *Eraṇḍa taila* 10 - 20 ml with half glass of milk at night
 - ii. *Abhyāṅga* (body massage), *Pādābhyāṅga* (foot massage), *Śiroabhyāṅga* (head massage) with medicated oils.
 - iii. *Śirodhārā* with medicated liquids (milk/ water/ oils (*Nārāyaṇa taila*) daily 45-90 minutes for 21 days



- iv. Picu with Kṣīrabalā taila/ Himasāgara taila
v. *Takra dhārā* daily 45 minutes for 14 days
3. Drug therapy

SINGLE DRUGS

Drug	Dosage (per dose)	MOA [§] / Vehicle	Duration*
<i>Aśvagandhā</i> (<i>Withania somnifera</i> Dunal) <i>cūrṇa</i>	3 gm	Sugar and <i>ghṛta</i> before meal	7 days
<i>Jaṭāmāṃsī</i> (<i>Nardostachys jatamansi</i> DC.) <i>cūrṇa</i>	500 mg - 1 gm	Milk after meal	7 days
<i>Brāhmī</i> (<i>Bacopa monnieri</i> Linn.) <i>cūrṇa</i> / <i>svarasa</i>	1-2 gm/ 10 ml	Milk/ sugar	7 days
<i>Maṇḍūkapaṇī</i> (<i>Centella asiatica</i> (Linn.) Urban.) <i>cūrṇa</i> / <i>svarasa</i>	1-2 gm/ 10 ml	Milk/ sugar	7 days

COMPOUND FORMULATIONS

Drug	Dosage (per dose)	MOA [§] / Vehicle	Duration*
<i>Māṃsyādi kvātha</i>	15-20 ml	Water	7 days
<i>Brāhmī vaṭī</i>	125-250 mg	Honey	7 days
<i>Sarpagandhādi vaṭī</i>	125mg	Milk	7 days
<i>Mānasa mitra vaṭaka</i>	125 mg	Milk	7 days
<i>Mahākalyāṇaka ghṛta</i>	6 gm	Warm milk/ warm water	7 days
<i>Nārāyaṇa taila</i>	for <i>śirodhārā</i>	-	21days
<i>Himasāgara taila</i>	for <i>śirodhārā</i>	-	7 days
<i>Kṣīrabalā taila</i>	for <i>picu</i>	-	14 days

[§] MOA - Mode of administration

*Initially 2 times in a day after meal for 7 days followed by condition of patient and physician's direction



NOTE: Out of the drugs mentioned above any one of the drug or in the combination may be prescribed by the physician. The duration of the treatment may vary from patient to patient. Physician should decide the dosage (per dose) and duration of the therapy based on the clinical findings and response to therapy.

Jaṭāmāṃsī (*Nardostachys jatamansi*)¹² has shown improvement in Insomnia.

c. Yogic Practices - The following *yogic* practices are beneficial in Insomnia; however, these should be performed only under the guidance of qualified *Yoga therapist*. Duration should be decided by the *Yoga therapist*.

1. Practice of *Prānāyāma* (*Candra anuloma viloma*, *Ujjai*, *Bhrāmarī*, Cooling *prānāyāma*) and meditation along with the practice of *Yama* and *Niyama*
2. *Sūryanamaskāra*, *Tāḍāsana*, *Matsyāsana*, *Maṇḍūkāsana*, *Bhujāṅgāsana*, *Padmāsana*, *Pascimottānāsana* and *Śavāsana*
3. Deep relaxation techniques, *Yoga Nidrā*

Counselling - advice the patient to

1. Drink warm milk before going to bed
2. Do some light physical activities before going to bed
3. Take warm bath before bedtime
4. Sleep on comfortable bed
5. Use the bed and bedroom only for sleep (it should not be used for watching TV and reading)
6. Maintain a regular sleep /wake up schedule
7. Practice *yoga* and meditation
8. Leave the bed if unable to fall asleep
9. Avoid stressful conditions
10. Avoid heavy meals at bed time
11. Avoid consumption of coffee, tea, soft drinks, alcohol and smoking
12. Avoid irregular sleep habits and nap during the day
13. Avoid watching TV at bed time

Indications for referral

1. Not responding to medication
2. Further deterioration in spite of medication



3. Insomnia associated with complications should be referred

COSTING DETAILS

Approx. costing of Insomnia Management

S.No.	Medicine	Requirement	Unit	Rate in Rs.	Cost in Rs.
1.	<i>Aśvagandhā cūrṇa</i>	42	gm	0.48	21
2.	<i>Jaṭāmāṃsī cūrṇa</i>	15-30	gm	1.0	15-30
3.	<i>Brāhmī cūrṇa</i>	15-30	gm	0.75	12-24
4.	<i>Maṇḍūkāparnī svarasa</i>	15-30	gm	0.75	12-24
5.	<i>Māṃsyādi kvātha</i>	210-420	ml	0.45	95-190
6.	<i>Brāhmī vaṭī</i>	1.75-3.5	gm	4.4	7.7-1.54
7.	<i>Sarpagandhādi vaṭī</i>	1.75	gm	5.2	10.0
8.	<i>Mānasa mitra vaṭaka</i>	2	gm	5.73	11
9.	<i>Mahākalyāṇaka ghr̥ta</i>	50	gm	0.67	34
10.	<i>Nārāyaṇa taila</i> (for <i>śirodhāra</i>)	1200-1500	ml	0.51	612-765
11.	<i>Himasāgara taila</i> (for <i>śirodhāra</i> / <i>śirovasti</i>)	1200-1500	ml	0.55	660-825
12.	<i>Kṣīrabalā taila</i>	200	ml	0.7	140

Approx. costing of *Pañcakarma* procedure in Insomnia **

S.No.	<i>Pañcakarma</i> procedure	Days	Rate in Rs./ day	Cost in Rs.
1.	<i>Abhyaṅga</i> (body massage)	15	200	3000
2.	<i>Śirodhāra</i> (with taila)	21	300	6300
3.	<i>Śirodhāra</i> (with milk)	21	150	3150
4.	<i>Takra dhāra</i>	14	150	2100
5.	<i>Picu</i>	14	100	1400

